

INTERDISCIPLINARY TEAM CHECKLIST

Project Title: Sevier Dry Lake Exploratory Testing

NEPA Log Number: DOI-BLM-UT-W020-2011-0015-EA

File/Serial Number:

Project Leader: Jerry Mansfield

DETERMINATION OF STAFF: *(Choose one of the following abbreviated options for the left column)*

NP = not present in the area impacted by the proposed or alternative actions

NI = present, but not affected to a degree that detailed analysis is required

PI = present with potential for relevant impact that need to be analyzed in detail in the EA

NC = (DNAs only) actions and impacts not changed from those disclosed in the existing NEPA documents cited in Section D of the DNA form. The Rationale column may include NI and NP discussions.

Determin- ation	Resource	Rationale for Determination	Signature	Date
PI	Air Quality	<ul style="list-style-type: none"> Activity levels would be relatively low during the exploration phase. The required Fugitive Dust Control Plan for the exploration phase will be included in the Exploration EA. Negligible contribution from vehicle/equipment operation during exploration phase. 	/s/ Paul Caso	10/13/11
NP	Areas of Critical Environmental Concern	There are no identified ACEC's within or around the project area.	/s/SBonar	10/17/11
NP	BLM Natural Areas	There are no Natural Areas within the project area.	/s/SBonar	10/17/11
PI	Cultural Resources	<ul style="list-style-type: none"> A Class III cultural resource inventory will be completed for any lands proposed for disturbance as part of the exploratory testing program. All sites will be avoided; therefore, no historic properties will be affected by the proposed project through the use of project redesign. A PA is being developed that identifies the APE and methodology proposed to complete the Section 106 requirements. 	/s/ Joelle McCarthy	10-18-11
NI	Greenhouse Gas Emissions**	Other than emissions from well motors, vehicles and other equipment, this project would not contribute a meaningful quantity of greenhouse gases to the atmosphere. These emissions would be transitory and would not be expected to contribute to climate change.	/s/ Paul Caso	10/13/11
NI	Environmental Justice	There are no minority or low income populations that would be disproportionately impacted by the proposed action.	/s/ Randy Beckstrand	10/11/11
NP	Farmlands (Prime or Unique)	A review of the NRCS Maps and consultation with NRCS soil scientists familiar with soils in the area indicate that prime and Unique Farmlands are not present in the area proposed for Potash Exploration. None of these map units meet the criteria for Prime or	/s/ Bill Thompson	10-18-11

Determin- ation	Resource	Rationale for Determination	Signature	Date
		Statewide Important Farmland. The overriding factor is the absence of an irrigation system in the area as soils in an aridic soil moisture regime require irrigation for the production of commonly grown agronomic crops. Physical and chemical soil properties of these soils also are outside the criteria for prime or important farmland. Most of the soils are too high in soluble salts; usually salts of sodium or calcium. The Dera soil has too many rock fragments greater than 3 inches in diameter.		
PI	Fish and Wildlife Excluding USFWS Designated Species	<ul style="list-style-type: none"> • In preparation for the exploratory drilling effort, wildlife surveys will be conducted in the areas that may be disturbed by the drilling program. The survey plan will be developed and submitted to the BLM for approval prior to implementation. • These baseline data will be included in the <i>Affected Environment</i> section of the Exploration EA. • The required Wildlife Mitigation Plan for the exploration phase will be included in the Exploration EA. 	/s/ Randy Beckstrand	10/11/11
NI	Floodplains	<ul style="list-style-type: none"> • All of Sevier Lake up to the 100-year flood mark can be classified as floodplain as defined in Executive Order 11988 on Floodplains • Exploration activities would occur within the defined 100-year floodplain. • However, there would be negligible consumptive use of water for exploration activities and, therefore, there would be no impacts or negligible impacts to subsurface water levels as a result of exploration activities. • No inundation will occur as a result of the exploration/testing program. • No ditches, berms, ponds, or other operations infrastructure will be constructed in the floodplain for the exploration phase, and there will be no alteration of floodplain topography or hydrology. 	/s/ Paul Caso	10/13/11
NI	Fuels/Fire Management	No issues or concerns	/s/ Gary Bishop	10/7/11
NI	Geology / Mineral Resources/Energy Production	The permanent loss of potassium sulfate from the mineral estate, if the lessees of the lakebed produce fertilizer, is discussed in the proposed action and purpose and need in the EA. It does not need to be analyzed as a resource issue in Section 4 of the EA.	/s/ Jerry Mansfield	10-20-11
NI	Hydrologic Conditions	Exploration activities are not expected to have an adverse impact to hydrologic resources.	/s/ Paul Caso	10/13/11
NI	Invasive Species/Noxious Weeds	There are no known weed infestations located in the proposed project area, therefore all equipment should be cleaned and free of any plant or soil debris.	R.B. Probert	
NI	Lands/ Access	The project, as proposed, would not affect access to public lands. A separate right-of-way (ROW) grant	/s/ Teresa Frampton	10/19/11

Determin- ation	Resource	Rationale for Determination	Signature	Date
		<p>would be issued for wells located off-lease. The wells would need to be planned in a manner that public access would not be limited.</p> <p>Existing roads and trails would be used to access the project area unless otherwise authorized. During wet road conditions, any ruts deeper than four inches remaining on the roads from the project would be repaired at the Authorized Officer's discretion.</p> <p>Generated trash/debris should be removed from public land and discarded at an authorized facility.</p> <p>The proposed project would be subject to valid, prior existing ROWs. ROW holders should be contacted and coordinated with, if the proposed project would affect their use.</p>		
PI	Livestock Grazing	<ul style="list-style-type: none"> • The proposed Potash Exploration activities would have very little impact to vegetation and therefore livestock forage would be unaffected • The proposed exploration activities would not deplete livestock water since very little water would be used for potash exploration. However, should wells which are sources of water for livestock be used for sources of water for drilling activities at the same time as the livestock are using it, then there may not be enough water for both uses • Traffic would increase in the area during exploration. Water is hauled to livestock along existing roads in certain areas at certain times during an allotment's grazing season. Concentration of cattle around the watering area when exploration activities are occurring on the same roadway could pose a risk to livestock. However, should proper precautions be taken by vehicle operators then the conflicts would be minimized and become negligible. Possible impacts to livestock from increased traffic could be mitigated by performing the exploration when livestock are not grazing in the area. There would be no impact to livestock grazing from increased traffic when cattle are not present. Cattle graze the Deseret Allotment during the Spring and Summer. Other Allotments in the area are grazed by sheep during fall, winter and spring. Specifics of when traffic would be in an area and when livestock would be in area would need to be determined to totally avoid traffic conflicts. 	/s/ Bill Thompson	10/7/11
PI	Migratory Birds.	<ul style="list-style-type: none"> • In preparation for the exploratory drilling effort, wildlife surveys will be conducted in the areas that may be disturbed by the drilling program. • These baseline data will be included in the <i>Affected Environment</i> section of the Exploration EA. • The Exploration EA will address these geographical areas only. Impacts would be 	/s/ Randy Beckstrand	10/11/11

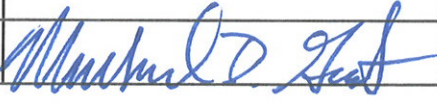
Determination	Resource	Rationale for Determination	Signature	Date
		<p>minimized by conducting exploration activities outside the nesting season.</p> <ul style="list-style-type: none"> • Impacts would be minimized by locating exploration features to avoid identified nesting areas. • Evaporation ponds will not be present during the exploration phase. 		
PJ	Native American Religious Concerns	<p>BLM initiated Native American consultation on a government-to-government basis on June 8, 2011. BLM FFO sent a letter to Native American Tribes inviting them to comment on the project and to provide assistance in identifying properties of traditional, religious, or cultural importance that may be impacted by the project. The letter was sent to the Paiute Tribe of Utah (PITU), Kanosh Band of the Paiute Tribe, Confederated Tribes of the Goshute Reservation, Skull Valley Goshute Tribe, and Uintah Ouray Ute Tribe.</p> <p>A copy of the PA was also sent to the tribal contacts with a request for comment. Tribal consultation will remain open throughout the exploration project.</p>	/s/ Joelle McCarthy	10-18-11
NP	Paleontology	No known significant paleontological resources occur at the site of the proposed exploration project	/s/ Jerry Mansfield	10-20-11
PJ	Rangeland Health Standards	<p>The proposed Potash Exploration Activities would not affect soils, vegetation, wetlands or riparian areas in a manner that would result in detrimental impacts that would cause rangeland health standards to not be met. Upland soils in the project area would continue to exhibit permeability and infiltration rates that sustain or improve site productivity, considering the soil type, climate, and landform. Since very little vegetation disturbance is anticipated desirable species would be maintained as they currently are. Wetlands and riparian areas would not be affected since they would be avoided. The proposed exploration activities are not anticipated to affect water quality. Little if any impact to water quality is anticipated, therefore the proposed action not anticipated to change the compliance of water quality in the area with state standards. However, since deep and shallow wells are proposed to be drilled there is a potential to impact water quality.</p>	/s/ Bill Thompson	10/7/11
NI	Recreation	The project will have no impacts to casual recreation and the use of the Cricket Mountain OHV trail system adjacent on the east side of the project area.	/s/SBonar	10/17/11
NI	Socio-Economics	<ul style="list-style-type: none"> • Employment levels would be relatively low during the exploration phase. It is estimated that exploration activities would take place over the course of about 4 months. • Impacts to local socioeconomic conditions as a result of exploration activities would be minor. • There would be no transfer of water rights for the 	/s/ Randy Beckstrand	10/11/11

Determination	Resource	Rationale for Determination	Signature	Date
		purpose of exploration/ testing of the minerals resource during the exploration phase.		
PI	Soils	Exploration activities on the lakebed itself will have no impact on soils. Soils in the project area would continue to exhibit permeability and infiltration rates that sustain or improve site productivity, considering the soil type, climate, and landform. Since very little vegetation disturbance is anticipated desirable species would be maintained as they currently are.	/s/ Paul Caso /s/ Michael Gates	10/13/11 10/19/11
PI	Threatened, Endangered or Candidate Plant Species	Appendix D of the Leasing EA provides a summary of federally listed or candidate species potentially occurring within the BLM-administered land within the FFO as of March 2010. Since that time, the USFWS list of plant species potentially occurring in Millard County has been updated with the addition of one plant species, Frisco clover (<i>Trifolium friscanum</i> ; Candidate). This species does not occur within the project leases, access roads, or locations proposed for hydrology wells.	/s/ Randy Beckstrand	10/11/11
PI	Threatened, Endangered or Candidate Animal Species	Appendix D of the Leasing EA provides a summary of federally listed or candidate animal species potentially occurring within the BLM-administered land within the FFO as of March 2010. Since that time, the USFWS list of species potentially occurring in Millard County has been updated with the addition of least chub (<i>Lotichthys phlegethontis</i> ; Candidate), and the status change of the California condor (<i>Gymnogyps californianus</i>) from being included in an experimental population to being protected as endangered. No TECP animal species will be impacted by the project.	/s/ Randy Beckstrand	10/11/11
NI	Wastes (hazardous or solid)	With the following stipulations included in the EA, this resource can be determined to have no impacts: <ul style="list-style-type: none"> All waste must be removed and all hazardous materials used or produced must be reported to the FFO. Waste certification stipulation as stated in the EA. 	/s/ Jerry Mansfield	10-20-11
PI	Water Resources/Quality (drinking/surface/ground)	<ul style="list-style-type: none"> There would be no minerals extraction during the exploration/testing program and, therefore, no associated water consumption. During the exploration phase, extraction from deep brine wells will be limited to the withdrawal of small amounts of fluids for testing. Groundwater quality: There would be no change in the ionic composition of the groundwater resource as a result of the exploration/testing program. Water Rights: The exploration program will involve drilling wells to extract small water samples for analyzing mineral concentrations of the groundwater resource. The exploration phase will also include installation of a well network for monitoring water levels to establish a hydrologic baseline. All freshwater used for drilling and 	/s/ Paul Caso	10/13/11

Determin- ation	Resource	Rationale for Determination	Signature	Date
		<p>testing will be brought in from off-site.</p> <ul style="list-style-type: none"> • The baseline water quality and water level information will be available for use in the <i>Affected Environment</i> section of the NEPA analysis for the mining operation. • Impacts to surface water from transportation activity would be relatively low during the exploration phase and would not involve hauling fuel or product. • No facilities will be constructed for the exploration program; therefore, stormwater runoff will not be an issue. • Furthermore, there will be little or no development of roads for the exploration program. Routine vehicular travel for exploration activities would not result in impacts to surface water. • Exploratory drilling sites will be small and surface disturbance will be minor. Any related erosion or stormwater runoff from these sites would be negligible. 		
PI	Wetlands/Riparian Zones	<ul style="list-style-type: none"> • There are no wetlands or riparian areas within the lands proposed for ground-disturbing activities in the Exploratory EA. 	/s/ Bill Thompson	10-07-11
NP	Wild and Scenic Rivers	There are no Wild & Scenic rivers identified by PL 11.111 for the Fillmore field Office.	/s/SBonar	10/17/11
NP	Wilderness/WSA	There are no Wilderness/WSA's within the project area.	/s/SBonar	10/17/11
NP	Woodland / Forestry	There is no occurrence of woodland/forestry resources in the project area.	/s/ Randy Beckstrand	10/11/11
	Vegetation Excluding USFWS Designated Species	<ul style="list-style-type: none"> • In that a survey could discover one or more special status plant species, there is a possibility that this resource would need to be analyzed in the Exploration EA. • The exploratory program will only involve areas within the Sevier Lake lakebed and areas on its periphery. The Leasing EA acknowledges that there are no vegetation resources within the lakebed, so that area would not need to be surveyed for plants. • A number of rare plants are known to occur in the vicinity of Sevier Lake. A survey was completed in June 2011, and did not locate any rare plants or their habitats within the areas proposed for ground-disturbing activities. • Baseline data from the survey will be included in the <i>Affected Environment</i> section of the Exploration EA. 		
NI	Visual Resources	<ul style="list-style-type: none"> • Activity levels would be relatively low during the exploration phase. • Negligible impact from exploration activities on visual resources as viewed from US Highway 6/50 	/s/SBonar	10/17/11

Determin- ation	Resource	Rationale for Determination	Signature	Date
		<p>or Blackrock Road.</p> <ul style="list-style-type: none"> • See issue immediately above. • Activity levels would not be such as to affect the VRM IV classification. • Fugitive dust impacts would be minor due to the low levels of vehicular activity for exploration/testing. A required Fugitive Dust Control Plan will be included in the Exploration EA, and will include measures to minimize fugitive dust impacts on visual resources. 		
NP	Wild Horses and Burros	There are no Wild Horse HMAs within the lease area. The closest HMA is the King Top HMA, whose eastern boundary is about 8 miles west of the lease area.	/s/Eric Reid	10/20/11
NP	Areas with Wilderness Characteristics**	There are no proposed areas with wilderness character located within or adjacent to the proposed project. The project area did not meet the solitude and/or unique recreation experience criteria based on a wilderness characteristics survey completed in January 2011	/s/SBonar	10/17/11

FINAL REVIEW:

Reviewer Title	Signature	Date	Comments
Environmental Coordinator			
Authorized Officer		10/28/11	